BoF: Identifying, connecting and citing research with persistent identifiers (PID}s)

eResearch Australasia 2019

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1. Realising the benefits of PIDs - Adrian Burton (ARDC)
2. ORCID in Australia - Melroy Almeida (AAF)
3. RAID Research Activity Identifier - Siobhann McCafferty (ARDC)
4. PIDs in the news - Natasha Simons (ARDC)
5. Open discussion with our Panel of PIDs Peeps (all of the above and Jens Klump CSIRO and IGSN)
Realising the Benefits of PID
Research System
Systems Integration

INTEROPERABILITY ENTER ONCE REUSE OFTEN

PUBLISHER Assert authorship

CONNECT COLLECT

RESEARCHER
https://orcid.org/0000-0001-2345-6789

CONNECT COLLECT

EMPLOYER Assert affiliation

CONNECT COLLECT

FUNDER Assert award

The Dataverse Project

Crossref Event Data

DataCite auto-update ORCID: steps towards integration

Researchers: (1) use ORCID ID when submitting a dataset (2) authorize DataCite to update a researcher’s ORCID record.

Data centers: (1) collect ORCID identifiers during submission (2) include the ID in the published work and include the ID when submitting to DataCite.

DataCite: upon receipt of data from a data center with a valid identifier, DataCite will automatically push that information to the researcher’s ORCID record.

RMS ORCID Integration

Collect Works
Populate Application Form

Find, Access, and Reuse Data
Culture and policy frameworks

- AGU FAIR project combining publishers, repositories, academies, funders
- “Joined-up research” for academic staff
- Research domain leadership
- Awareness

3.3 Acknowledging the use of others’ data

The Code and Authorship: A guide supporting the Australian Code for the Responsible Conduct of Research require that the work of others is appropriately referenced and cited in the presentation, publication or sharing of research. This principle applies to all data and information used as an input to a research project. In referencing and citing the work of others, researchers should follow accepted norms and standards for scholarly literature and can reasonably expect that their work is acknowledged by others.
What problems can we address with our PIDs?

- Improve open science?
- Efficient research management processes?
- Track impact of data?
- ....
ORCID in Australia

Sharing the Australian #ORCID Lifestyle at the Consortium Lead meeting 2018
ORCID - Open Researcher & Contributor ID

Unique PID for researcher
Free for researcher
Community Driven
ORCID Adoption - Global

ORCID Adoption Globally

Number of ORCID IDs (in Millions)

1- Jan-15 1- Jan-16 1- Jan-17 1- Jan-18 1- Jan-19

728137 1000000 2300000 3500000 4900000 7000000

7.3 million
RESEARCHERS GLOBALLY
REGISTERED WITH AN
ORCID ID
ORCID Adoption - Global

ORCID Adoption Globally

7.3 million
RESEARCHERS GLOBALLY REGISTERED WITH AN ORCID ID

1070 Members
FROM 45 COUNTRIES
ORCID Adoption - Australia

Australian ORCID ID Adoption

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<tr>
<th>Date</th>
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</table>

122,000+ Australian Researchers Registered with an ORCID ID
Australian ORCID Consortium

41 Members

2 Funders

1 Research institution

38 Higher Education
Australian ORCID Consortium

78% members have done an integration
Australian ORCID Consortium

78% members have done an integration
Australian ORCID Consortium

78% members have done an integration

Member Integration Type

Vendor  Custom
15      23

Vendor Integration

- Symplectic Elements: 11
- PURE: 6
- IRMA (University Office): 2
- PeopleSoft (HR System): 1
- ePrints: 1
- ScholarONE: 1
- VIVO: 1

Different vendor types
Our aspiration is that, by 2020:

- All active researchers in Australia have an ORCID identifier.
- All Australian research activity uses ORCID throughout the research lifecycle.
- ORCID is seen as the best way in which to identify individual researchers.
- ORCID is integrated into researchers’ grant management systems.
- The ARC/NHMRC will integrate ORCID with their grant management systems.
- Government agencies will use ORCID data for decision-making.
- The ORCID Australia Advisory Group supports the development of the ORCID ecosystem in Australia.

Australia will benefit from reduced administrative burden on researchers and research managers/administrators, and increased access to Australia’s research outputs and associated activities.

The Australian ORCID Advisory Group
July 2017
National ORCID Forum 2019

Panel: PIDS for the future of Australian Research

Chair: Linda O’Brien, Griffith University

Dr Laure Haak, ORCID
Dr Dan Duncan, ARDC
Margie Jantti, CAUL
Justin Withers, ARC

#ORCIDForum2019
ORCID is part of the wider digital infrastructure needed for researchers to share information on a global scale.

_We use identifiers for people, places, and things. We need you to use these too!_

Laurel Haak, ORCID National Forum 2019
RAiD: an update and integration news

RAiD integration with the Nectar Cloud

PRESENTED BY
Siobhann McCafferty
Project Manager
ARDC
Why a Project ID?

- Projects are a stable entity
  - Researchers move, institutions change, but projects remain
- Removes the issue of the individual gatekeeper
- Reflects collaborative practices
- Low administration burden
- Improves reporting for infrastructure usage
- Provide clear lines of provenance
Research Activity Components

**Entities**
- Researcher
- Funder
- Institutions
- Infrastructure owner
- Instrumentation owner
- Publishers

**Actions**
- Uses (tools)
- Funds (activity)
- Creates (output)
- Collaborates (with)

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**Diagram Elements**
- Researcher
- Institution
- Instrument
- Project
- Team
- Funding
- Infrastructure
- Data
Project Centred Model

- Project has Persistent ID
- Entities recorded in Metadata
- Research actions reflected in project timeline
- Related PIDs recorded in metadata
RAiD Service

- REST API
- Handle via ANDS
- Central metadata Store
- RAiD Metadata Manifest / DMR

- No schema
- No fees
- Platform agnostic
- Simple integration
RAiD DMR

Contributors

# 13.1010/463
UQDMR
17/09/2017

DOI

# 3457.2300/107

http://10.1002/005-4721(7214)31:2

ROR

https://ror.org/00rqy9422
https://ror.org/03b94tp07

CONTRIBUTORS

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ANDS RDS Dataset

Figshare Dataset

Subproject

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m.blogs@uoa.edu.nz (01/07/15 - ....)
http://orcid.org/0000-0002-3843 (04/07/15 - 04/07/17)

Australian Research Data Commons

Subproject

UQ local storage Nectar Instance (04/07/15 – 17)
Cloudstor storage (04/07/15 – ....)

UQ local storage (04/07/15 – 17)
RAiD Update

RAiD Technical

- RAiD 1.2 dev work finished. Includes:
  - Open and closed tags
  - RAiDs harvested to Orcid profile as ‘work’
  - Enhanced Orcid integration (via RIPEN project)

RAiD ISO

- 34 Month ISO process
- First meeting of WG tomorrow
- In process
  - Handle to DOI

RAiD Governance

- RAID Advisory Group set up
- Transition service management to ARDC
- TOR agreed
RAiD Futures

RAiD Technical

- RAiD to become an Orcid Activity Type
- Technical service transitioning to ARDC
- Integrations in progress
  - NIF national sites
  - Nectar Allocation Integration

RAiD ISO Process

- Distributed Minting governance clarified and standardised
- RAiD ISO Draft due December

RAiD Governance

- RAID Advisory Group to meet in November
- RAG Membership diversifying
- Distributed Minting governance structure to be decided
RAiD Nectar Cloud Integration: Drivers

- Linking Nectar cloud resource allocations with research projects, research grants, and the outputs of the projects should make it easier to report to the federal government and other stakeholders on the impacts of the use of the Nectar Research Cloud.

- The Nectar Cloud allocation process is currently not automated and require manual data entry. PID use via RAiD would improve speed, accuracy and allow for the harvesting of relevant related metadata.

- Persistent Identifiers will improve data access and linkage across platforms such as Nectar cloud, Virtual Labs and data storage platforms.

- Explore alignment of approaches with other NCRIS areas and institutions.
RAiD Nectar Cloud Integration: Driver 1

Linking Nectar cloud resource allocations with research projects, research grants, and the outputs of the projects should make it easier to report to the federal government and other stakeholders on the impacts of the use of the Nectar Research Cloud

- Institute RAiD minting facility in Nectar allocation workflow
- Leverage PID’s stored in the RAiD DMR to link funding, infrastructure, instrumentation, people and outputs
The Nectar Cloud allocation processes require manual data entry. PID use via RAiD would improve speed and accuracy and allow for the collection of relevant related metadata.

- PID information (Orcid, Instrumentation) can improve interoperability and facilitate access to data, tools and services across platforms.
RAiD Nectar Cloud Integration: Driver 3

- Persistent Identifiers will improve data access and linkage across platforms such as Nectar cloud, Virtual Labs and data storage
  - Standardise information formats
  - Make use of RAiD DMR content to auto populate the allocation request form
  - Use Orcid identity information to facilitate platform interaction and access to data and outputs for cloud users
RAiD Nectar Cloud Integration: Driver 4

Explore alignment of approaches with other NCRIS areas and institutions

- Re-use approaches across multiple organisations, provide a standard or exemplar approach that could be used by other organisations including NCRIS capabilities
PIIDs in the news
PIDs in the news

CrossRef Grants Identifier Metadata Schema

https://github.com/CrossRef/grantID-schema/

- Grant IDs will have their own dedicated schema that differs from CrossRef publication schema
- Input from Funder Advisory Group
- Used to register persistent identifiers (DOIs) for grants and other funding through Crossref. The item being identified is a ‘grant’ but the identifier may be applied to other types of funding, such as equipment and facility use.

The proposed schema is available for feedback.
PIDs in the news

ROR is the Research Organization Registry, a community-led project to develop an open, sustainable, usable, and unique identifier for every research organization in the world. ROR is a robust and stable registry of identifiers for close to 100K organizations (and counting!)
or.org

The three pillars of FREYA

The PID Graph connects and integrates PID systems, creating relationships across a network of PIDs and serving as a basis for new services.

The PID Forum promotes engagement with the global community via pidforum.org, and through organising conferences, workshops and other PID-themed events.

The PID Commons addresses the sustainability of the PID infrastructure resulting from FREYA beyond the lifetime of the project.
PID in the news

Persistent Identifiers - PID IG
Persistent Identification of Instruments WG
Open Science Graphs for FAIR Data IG
PIDapalooza is back and it's better than ever!
California Digital Library, Crossref, DataCite, and ORCID invite you to Portugal for two amazing days jam-packed with PID demos, workshops, brainstorming, and updates on the state of the art.

Get your backstage pass

pidapalooza.org
Panel of PID Peeps

Adrian Burton (ARDC)

Melroy Almeida (AAF)

Siobhann McCafferty (ARDC)

Jens Klump (CSIRO)

Facilitator: Natasha Simons (ARDC)